IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:	)	
	)	
Kocev et al.	)	Confirmation No. 1813
	)	
Serial No.: 09/944,776	)	Examiner: Pham, Thomas K.
	)	Group Art Unit: 2121
Filed: August 31, 2001	)	
	)	
For: Programmable Tuning for Flow Control	)	HP Docket: 200301967-2
and Support for CPU Hot Plug	)	TKHR Docket: 050849-1810

REPLY BRIEF

This brief is filed in reply to the Supplemental Examiner's Answer, which was mailed

June 2, 2009.

Response to Supplemental Examiner's Answer

The rejection sections on pp. 4-15 of the Supplemental Examiner's Answer appear to

generally recapitulate the prior positions taken by the Examiner in the previous Examiner's

Answer. Appellant continues to disagree with the Examiner's positions as to all claim rejections

under appeal, and Appellant's Appeal Brief sets forth, from a substantive basis, the reasons why

the proposed combination of references does not properly teach the claimed features.

Therefore, rather than restate or reiterate the rather lengthy bases and reasons for this

continued disagreement, Appellant simply re-alleges the positions already set forth in the

Appeal Brief. However, Appellant does take the opportunity in this Reply Brief to address

selected points brought up by the Examiner in the Response to Argument section of the

Supplemental Examiner's Answer (pp. 16-20).

1. *Westerinen* fails to disclose "criteria for <u>transactions</u>"

Appellant takes this opportunity to repeat a point made earlier in the Appeal Brief filed

May 29, 2008: that *Westerinen* fails to disclose "criteria for <u>transactions</u>". The Supplemental

Examiner's Answer explains the Examiner's position on how *Westerinen* teaches this feature as follows:

> Regarding claim 13 Westerinen teaches… setting criteria (configuring) for routing transactions (tasks) to the port with respect to the numbers of devices at the ports (see col. 2 lines 43-53 and col. 7 lines 21-33) (Supplemental Examiner's Answer, p. 4.)

Appellant noted disagreement with this position in the Appeal Brief filed May 29, 2008 (p. 9), pointing out that "there is no mention in this excerpt [from *Westerinen*] of 'transactions' at ports". The Examiner did not respond to this point in the Supplemental Examiner's Answer. Appellant maintains that *Westerinen* does not teach "criteria for <u>transactions</u>" of any kind.

To begin, Appellant notes that *Westerinen* does not use the term "transaction" at all in describing device configuration. The Examiner uses the term "tasks" in the rejection, apparently as a synonym for the claim term "transactions". However, the term "task" does not appear even once in *Westerinen*, so it is unclear to Appellant how "task" is relevant to the rejection or the claims.

Turning now to the specific portions of the reference relied on by the Examiner, Col. 2 lines 43-53 of *Westerinen* teaches a ruled-based process for configuring devices in a computer. Although not explicitly mentioned in this particular paragraph of the reference, Appellant also assumes that such configuration occurs by assigning resources to the devices based on the rules. Even so, the claims at issue recite "criteria for transactions", while neither the assigning nor the rules in *Westerinen* have nothing to do with transactions.

The second portion of *Westerinen* that is relied on by the Examiner (Col. 7 lines 21-33) teaches creating a list of device resources, where the list is arranged in groups, and ordered in a particular manner. Even so, the rejected claims recite "criteria for transactions", while the resource list in *Westerinen* has nothing to do with transactions.

2. *Westerinen* fails to disclose "criteria for transactions <u>at the port</u>"

Appellant takes this opportunity to repeat a point made earlier in the Appeal Brief filed

May 29, 2008: that *Westerinen* fails to disclose "criteria for transactions <u>at the port</u>". As

discussed above, the Supplemental Examiner's Answer alleges that *Westerinen* teaches

"setting criteria for transactions at the port with respect to the number of devices" at Col. 2 lines

43-53 and Col. 7 lines 21-33. Appellant disagrees, and maintains that *Westerinen* does not

teach "transactions at the port" with respect to anything. The first cited portion of *Westerinen*

teaches a ruled-based process for configuring devices in a computer, and the second cited

portion of *Westerinen* teaches creating a list of device resources, where the list is arranged in

groups and ordered in a particular manner. This second portion also teaches that the list

includes I/O port resources. Appellant assumes, for the sake of argument, that a person of

ordinary skill in the art would understand that *Westerinen* implicitly teaches the use of rules to

assign I/O port resources to a particular device. Even so, using rules to assign I/O port

resources is not the same as doing anything with "transactions at the port", as recited in the

rejected claims.

3. *Westerinen* fails to disclose "setting criteria for transactions at the port
   <u>with respect to the number of devices</u>"

The Supplemental Examiner's Answer alleges that the "with respect to the number of

devices" feature is disclosed by *Westerinen* as follows:

> In response to appellants' arguments, the reference of Westerinen (USPN 6,119,185) discloses the purpose of the invention is to correctly configure a computer platform to support different types of I/O add-in adapters such as ISA, EISA and/or PCI. A set of rules (criteria) is generated to define the configuration process as described below in column 2 lines 41-53...
>
> Westerinen, further discloses in column 8 lines 25-37 that the rules are also based on the number of devices currently plugged in with the system and prohibit these devices from using the same configuration setting to avoid any conflicts between devices so that transactions can be routed to the ports as described below:
>
> > "With respect to Rules 5 and 6 regarding sharing resource values, during the assignment process, <u>all potential setting values must be checked to verify that another device has not been allocated</u>

> the same value. If the value is already being used and the resource can not be shared between the devices, then the current device is prohibited from using that value. The implementation of this checking mechanism is straight forward for those resources that use a single integer value, such as IRQ's and DMA's. If there is another device using a setting value and both resources cannot share values, then a conflict exists. Checking conflicts for resources that use a range of values (memory and I/O port) requires a determination as to whether there is overlap between the ranges."
>
> According to the above two cited portions above, Westerinen is clearly setting up a computer platform for supporting different I/O adapter using a set of rules (or criteria) with respect to a number of devices currently active to check for any potential conflict occurring between the devices so that devices can be shared (assigned) and transactions can be processed at the adapters. Thus, Westerinen teaches the claimed limitations "setting criteria for routing transactions to the ports with respect to the numbers of devices at the ports"
> (Supplemental Examiner's Answer, pp. 16-17, emphasis in original.)

Appellant agrees that *Westerinen* teaches generation of rules which define the configuration process. However, Appellant strongly disagrees with the characterization of *Westerinen* Col. 8 lines 25-37 as teaching "that the rules are also based on the number of devices currently plugged in with the system" and as teaching "using a set of rules (or criteria) with respect to a number of devices currently active". Appellant submits that this passage teaches, at most, assigning resources to a device using rules that take into account the resources already in use by other active devices. However, resource assignment based on use by other devices is not the same as assignment based on "**the number** of devices".

Furthermore, the claims require "setting criteria" and the Examiner has not clearly explained what action in *Westerinen* allegedly teaches "setting". The Examiner does clearly allege (p. 17) that the rules in *Westerinen* are the claimed "criteria", and *Westerinen* appears to teach applying rules to perform a configuration, and creating rules. However, Appellant submits that neither of these actions is the same as the claimed action "setting", and the Examiner has not explained why a person of ordinary skill in the art would understand them to be the same.

4. *Westerinen* fails to disclose "with respect to the numbers of devices at the ports, assigning resources to the ports"

The Supplemental Examiner's Answer alleges that this feature is disclosed by

Westerinen as follows:

> Furthermore, Westerinen discloses an assignment of the devices is dependent upon all other devices currently active at the I/O ports as described in column 8 lines 38-51…
>
> "…The assignment of one resource is "dependent" upon the other. If IRQ4 cannot be assigned because of a conflict, than I/O Port 3F8-3FFh can not be assigned…"
>
> (Supplemental Examiner's Answer, p. 17.)

Appellant disagrees with this allegation. Appellant submits that this passage teaches, at most,

taking into account the resources already in use by other active devices when assigning

resources to a device. However, resource assignment based on <u>use of that resource by other</u>

<u>devices</u> is not the same as resource assignment based on "**<u>the number</u> of devices**".

5. *Wilson* fails to disclose "determining the number of devices being serviced via the ports"

The Supplemental Examiner's Answer alleges that the feature "with respect to the

number of devices" is disclosed by *Wilson* as follows:

> In addition, the reference of Wilson (USPN 6,718,413) discloses a method to determine the number of devices are contending for a bus to re-select a host adapter as described in column 10 lines 29-46 below:
>
> "FIG. 6 shows a flowchart of an exemplary method for <u>generating reduced number of interrupts</u> in accordance with another embodiment of the present invention. In this method, one or more I/O commands are received for transferring data between a host computer and one or more I10 devices in operation 602. Then, at each arbitration phase after a command completion, the host adapter monitors SCSI bus contention, in operation 604, <u>to determine the number of devices arbitrating for the bus to re-select the host adapter</u>. Next in operation 606, <u>it is determined whether more than one device are contending for the bus. If so, data is transferred to the host adapter by a selected device having the highest priority</u> (i.e., highest SCSI ID number) in operation 608. Then in operation 610, the SCSI devices including the host adapter wait for the completion of data transfer by the selected device. The completion of data transfer will be indicated by a command completion message asserted over the bus."
>
> (Supplemental Examiner's Answer, pp. 17-18, emphasis in original.)

Appellant disagrees with this allegation, and submits that the number of devices arbitrating or contending for the bus is not the same as the number of devices being serviced via the ports. First, arbitration/contention is not the same as servicing, and the Examiner has not explained why a person of ordinary skill in the art would understand them to be the same. Second, a bus is not the same as "ports", and once again, the Examiner has not explained why a person of ordinary skill in the art would understand them to be the same. The Examiner's statements are merely conclusory, being unsupported by evidence or reasoning. Furthermore, as argued earlier in the Appeal Brief filed May 29, 2008 (p. 11), *Wilson* teaches that the number of devices will be determined to be zero when none of the SCSI devices (306) in *Wilson* are arbitrating for the bus (314), even though more than zero SCSI devices (306) are connected to the SCSi adapter (316).

6. Motivation for combining *Westerinen* and *Wilson* is improper

As an alleged motivation for combining *Westerinen* and *Wilson*, the Supplemental Examiner's Answer provides:

> By combining the number of devices being serviced at a host adapter of Wilson with the system of Westerinen, the system of Westerinen can beneficially apply the method of Wilson for the purpose of generating reduced number of interrupts upon completing one or more commands. (Supplemental Examiner's Answer, pp. 17-18, emphasis in original.)

Although "generating reduced number of interrupts" appears to be a benefit to the system of *Wilson*, the Examiner has not explained why this would be beneficial to the system of *Westerinen*, and thus why this would be a motivation to use the teachings of *Wilson* with *Westerinen*. Although *Westerinen* does involve configuring interrupts used by particular devices, *Westerinen* does not discuss how interrupts are handled while the system is running. Appellant submits that a person of ordinary skill in the art would <u>not</u> have a reason to take a teaching about reducing the number of interrupts that result from completion of a command from *Wilson* and apply it to the system configuration teachings of *Westerinen*.

Conclusion

In summary, Appellant and the Examiner have a fundamental disagreement as to the applicability of the combination of cited references to the presently pending claims, and as to the appropriateness of the rejections set forth. For at least the reasons fully set forth in the Appeal Brief and those additional reasons set forth here, Appellant respectfully request that the Board overturn the Examiner's rejections.

Respectfully submitted,

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